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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/010,118

12/06/2001

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2001-0079

4809

7590

04/21/2006

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EXAMINER

JAGANNATHAN, MELANIE

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/010,118

Applicant(s)

JAMES, JAMES H.

Examiner

Melanie Jagannathan

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 is/are allowed.
- 6) ☒ Claim(s) 1, 6 and 8 is/are rejected.
- 7) ☒ Claim(s) 4, 5 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- Examiner has considered Amendment after Non-Final mailed 10/24/2005.
- Claims 1, 4-9 are pending.

Claim Objections

1. Claim 7 is objected to because of the following informalities: on line 2, "the echo cancellers" should be changed to "one or more echo cancellers". Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Tamura et al. US 4,126,770.

Regarding claim 1, the claimed method for echo reduction is disclosed by method to minimize residual echo in communication between a transmitting terminal and receiving terminal. See column 1, lines 35-38. The claimed setting a predetermined time period having an expiration, the claimed initializing a timer to operate for predetermined time period at start of transmission of communication signals is disclosed

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by timer (Figure 1, element 8) that measures period of time that has elapsed from the moment of start of telephone call to 500 ms. See column 3, lines 16-21, lines 33-39, lines 44-52, lines 56-63. The claimed attenuating communication signals at start of transmission until expiration of predetermined time period to reduce amplitudes of echo signals prior to echo cancellation is disclosed by detection of start of telephone call, detecting signal power exceeding a predetermined threshold level, setting a variable coefficient $\alpha \geq 1$ to subject the impulse response to a large amount of correction from its initial value until 500 ms has lapsed. See column 1, lines 16-22, column 3, lines 23-38. After 500 ms has passed, the variable coefficient is set to <1 for duration of call to provide slow correction of impulse response. See column 1, lines 23-29, column 3, lines 33-43. Examiner interprets claimed attenuation from start of transmission prior to echo cancellation with Tamura et al's disclosure of rapid correction of impulse response to eliminate residual echo from start of telephone call for certain amount of time and then slow correction for duration of call.

Regarding claim 6, the claimed attenuation values is disclosed by variable coefficient α .

Allowable Subject Matter

4. Claims 4-5, 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 4, prior art of record does not disclose, in single or in combination, receiving signals from echo cancellers indicating echo signals are cancelled below a threshold in combination with attenuating communication signals from start of communication to when signals from echo cancellers are received.

Regarding claim 5, prior art of record does not disclose, in single or in combination, adjusting an attenuation value based on signals from one or more echo cancellers to attenuate communication signals.

Regarding claim 7, prior art of record does not disclose, in single or in combination, setting attenuation values based on estimated effectiveness of echo cancellers from start of communication.

5. Claim 9 is allowed.

Prior art of record does not disclose, in single or in combination, receiving signals from echo cancellers indicating echo signals are cancelled below a threshold and attenuating communication signals from start of communication based on signals from one or more echo cancellers prior to echo cancellation.

Response to Arguments


6. Applicant's arguments with respect to claims 1, 4-9 have been considered but are moot in view of the new ground(s) of rejection. Examiner appreciates detailed description of prior art in arguments.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Jagannathan whose telephone number is 571-272-3163. The examiner can normally be reached on Monday-Friday from 8:00 a.m.-4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJ 
4/14/2006


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800 4/17/06